

Mr. Dacey

# G. C. Dacey Is **New Sandia VP**, Research

G. C. Dacey, presently Director of Solid State Electronics Research, Bell Telephone Laboratories, was recently elected Sandia Corporation Vice President, Research. The announcement was made Aug. 22 by the Sandia Corporation Executive Committee. The appointment becomes effective Oct. 16.

Mr. Dacey will fill the unexpired term of C. F. Quate who recently accepted a position of Professor of Applied Physics and Electrical Engineering at Stanford University.

Mr. Dacey has been a member of the technical staff of Bell Telephone Laboratories since 1951. His first several years were spent in transistor device feasibility studies. He later supervised a group engaged in development work on silicon transistors and crosspoints. He was named assistant director of solid-state electronics research in 1958 and was appointed Director of the Solid-State Electronics Research Laboratory in 1960.

A native of Chicago, he received the degree of BS in electrical engineering from the University of Illinois in 1942 and the PhD in physics from California Institute of Technology in 1951. At Cal Tech he was a Murray Scholar and held the A. O. Smith Post-Doctoral Fellowship. He was with the Westinghouse Research Laboratories from 1942-45.

Mr. Dacey holds several patents on transistors and is the author of a number of articles for technical publications. He is a member of the Institute of Radio Engineers, the American Physical Society, Eta Kappa Nu, Phi Kappa Phi, Sigma Xi, and Tau Beta Pi.

# Large Share of UCF Funds Helps Youth Of City; Sandians Play Important Part

The future strength of a nation Martineztown House of is vested in its youth. Employees of Sandia Corporation help to assure the nation's strength by their contributions to the United Community Fund, because a large share of their contributions finds its way to community agencies which are directly concerned with the well-being of Albuquerque's young people.

The following agencies provide services to Albuquerque youth: Martineztown House of Neighborly Service, Young Men's Christian Association, Albuquerque Boys' Club, Young Women's Christian Association, Albuquerque Council of Camp Fire Girls, Inc., Chaparral Council of Girl Scouts of America, and the Kit Carson Council of the Boy Scouts of America.

### **Neighborly Service**

The Martineztown House of Neighborly Service, which receives support from the United Presbyterian Church, receives a substantial share of its operating income from the UCF. It provides a host of activities for young people of nursery age through high school.

This summer. 30 boys participated in baseball activities. Teams were made up of boys from the neighborhood around the House. There were 18 participants in a boys' camp at Loma Verde near Taos, N. M. During the summer months, there were over 50 enrollees in nursery classes at the House.

The Martineztown House is dedi-

cated to promoting the spirit of neighborliness among the people of Albuquerque and Martineztown, and to provide for the health, educational, recreational, social, and spiritual needs of the neighborhood.

The House employs a full-time summer staff of bi-lingual workers. Director for the House is Miss Myrtle Walmsley.

#### Young Men's Christian Association

The YMCA provides activities for a substantial number of children of the families of Sandia employees, as well as programmed activities for many Sandia families whose members are all active in YMCA activities.

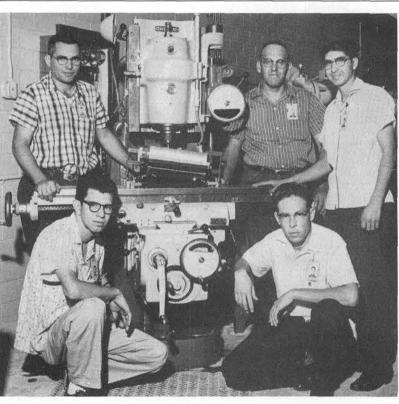
R. W. Henderson (100) and R.



B. Powell (3000) are on the board of directors. Seven Sandians are members of the Heights YMCA board of governors. The chairman of the board of governors is D. J. Jenkins (3130). K. A. Smith (3400) is vice chairman. Other members are S. H. Peres (3133-1), W. R. Rosenburg (4360), T. E. Zudick (3465-1), Donald Fossum (2412-2), and John McLay (1420).

The YMCA welcomes everyone into its programs, and membership is open to everyone, regardless of race, creed, or social or economic status. There are 5014 people enrolled in the three branches of the YMCA. The Heights branch, at 4901 Indian School Rd. NE, enrollment is comprised in large part of Sandians and of children of Sandia Laboratory families. The Downtown branch of the YMCA is located at 21 Central NE. In addition to regular youth programs, the Downtown YMCA provides residence privileges. The third YMCA branch is located at 1813 Broadway SE and serves many underprivileged children.

Physical conditioning classes are popular among "Y" members and enrollees. Classes in wrestling, swimming, and gymnastics are taught to graded groups of youngsters by qualified instructors, and (Continued on Page Three)



GRADUATING TODAY, these five journeyman machinists have completed an 8000-hour apprenticeship program. In front are Tony Saavedra and John Garcia. Standing are (left to right), graduates Walt Mooney, Bob Tant and Emiliano Sanchez.

# **Fourth Machinist Apprentice Program Class Graduates Today**

The fourth class in Sandia Laboratory's Machinist Apprentice Program graduates today. The men are Robert G. Tant, Walter C. Mooney, Antonio Saavedra, John A. Garcia, and Emiliano Sanchez.

The men entered the program when it was inaugurated in March 1958. They received credit for previous on-the-job training at Sandia. The graduates, now journeyman machinists, have completed approximately 8000 hours of training, 7100 hours of machine shop experience plus 900 classroom hours in related studies. will be reassigned from They Apprentice Machine Shop 4254-2 to positions in various machine shops in Mechanical Department 4250.

The only non-New Mexican among the graduates, Walt Mooney has been at Sandia four years. He came here from Andover, N. J., and entered on-the-job training when starting at Sandia. He is married and has two sons, aged nine and seven.

Bob Tant started in assembly work at Sandia almost 10 years ago. He is originally from Magdalena, but has lived in Albuquerque some 12 years. He is married and has an eight-year-old daughter.

Tony Saavedra is a 1955 graduate of St. Mary's High School in Albuquerque. He has been at Sandia four and one-half years in machine shop training. His two daughters are one and one-half years and three months.

John Garcia started as a messenger at Sandia five years ago. After six months he entered the apprentice training program. He is from Belen. His two sons are three and two years old, his daughter, one.

Emiliano Sanchez started as a records clerk at Sandia almost five years ago. He entered machinist training after five months. He graduated from Bernalillo High School in 1950. His four sons are eight, six, four, and two years old.

## **Practice Evacuation, Alarm Test** Held Last Week Termed Success

The first simultaneous testing

The test was arranged through



**EMPLOYEES WORKING in Bldg. 800 comprised** small group shown in front of Administration Building during testing of evacuation alarms Aug.

24. Although all buildings in Tech Area I were included in the test, the crowds were widely dispersed. Public address system was also tested.

of all building evacuation alarms and the public address system in Sandia Laboratory's Tech Area I has been termed successful.

The test was held Thursday, Aug. 24, at 10 a.m. and affected about 6000 employees.

The evacuation alarms were set off by a central button in Bldg. 801. It activated all but about 10 per cent of the alarms, which had to be manually started by building evacuation crews or fire captains. The building evacuation crews are comprised of about 900 employees who are trained in the use of fire extinguishers, operation of alarms, and evacuation methods.

After the alarm sounded employees secured classified material, closed windows, and then headed for the nearest doorin some instances they were emergency doors not ordinarily used. As a result, the clusters of employees were scattered throughout the area.

After a few minutes the purpose of the test and procedures to be followed in actual emergencies were announced on the public address system.

the cooperation of Plant Engineering Department 4540, Security Operations Department 3240, and Emergency Planning Section 3232-1.

### Sandia Corporation **Board of Directors** Meets Here Sept. 6-7

Sandia Corporation's Board of Directors will meet at Sandia Laboratory Sept. 6 and 7 for their annual meeting and technical briefings.

Sandia members of the Board are S. P. Schwartz, President, and R. W. Henderson, Vice President, Weapon Programs.

Visiting members of the Board are: from the Bell Telephone Laboratories-J. B. Fisk, President, and H. K. Onstott, Vice President and General Manager; from the Western Electric Company-H. I. Romnes, President; W. L. Brown, Vice President and General Counsel; P. R. Brousse, Vice President, Manufacturing Division; and C. R. Smith, Vice President, Radio Division.

#### **Editorial Comment**

# The Ten Pillars . . .

American people are becoming more conscious of the workings of our economic system. We now hear the words inflation, recession, boom, hard money, discount rate, bank clearings, and the like, much more than ever before. Realizing that the fate of the country rests with the success of our economy, today's serious student of current affairs is also a student of economics.

LAB NEWS

The American Economic Foundation suggests "Ten Pillars of Economic Wisdom" be studied by citizens of this country. By understanding these basic facts Americans can make better decisions and help lead their country in sound paths of economic endeavor.

Here are the "Ten Pillars of Economic Wisdom."

- 1. Nothing in our material world can come from nowhere or go nowhere, nor can it be free; everything in our economic life has a source, a destination, and a cost that must be paid.
- 2. Government is never a source of goods. Everything produced is produced by the people, and everything that government gives to the people it must first take from the people.
- 3. The only valuable money that government has to spend is that money taxed or borrowed out of the people's earnings. When government decides to spend more than it has thus received, that extra unearned money is created out of thin air, through the banks, and, when spent, takes on value only by reducing the value of all money, savings, and insurance.
- 4. In our modern exchange economy, all payrolls and employment come from customers, and the only worthwhile job security is customer security; if there are no customers, there can be no payrolls and no jobs.
- 5. Customer security can be achieved by the worker only when the "boss" is allowed by the worker to do the things that win and hold customers. Job security, therefore, is a partnership problem that can be solved only in a spirit of mutual understanding.
- 6. Because wages are the principal cost of everything, widespread wage increases, without corresponding increases in production, simply increase the cost of everybody's living.
- 7. The greatest good for the greatest number means, in the material sense, the greatest goods for the greatest number which, in turn, means the greatest productivity per worker.
- 8. All productivity is based on: Natural resources whose form, place, and condition are changed by the expenditure of human energy (both muscular and mental), with the aid of tools.
- 9. Tools can increase only when there is a reward for the temporary self-denial that people must practice to channel part of their earnings away from purchases that produce immediate comfort and pleasure and into tools of production. Proper payment for the use of tools is essential to their creation.
- 10. The productivity of the tools that is, the efficiency of the human energy applied in connection with their useis highest in a competitive society in which the economic decisions are made by millions of progress-seeking individuals rather than in a state-planned society in which those decisions are made by a handful of all-powerful people, regardless of how well meaning, unselfish, sincere, and intelligent those people may be.



# Weddings

Sandra McIntosh (8212-3) was married to Eric Smith of Danville, Calif., on Aug. 19. The morning ceremony was held at St. Luke's Lutheran Church in Walnut Creek. After a short honeymoon in Carmel, the couple returned to Pleasant Hill, where they are residing at 1903 Mayhew.

WIDE VARIETY of cacti and tropical plants are Luke Vortman (5112). His collection of cacti is found in this enclosed patio recently completed by

outstanding and contains more than 350 species.

### **Cactus Collection Lives Comfortably** In Patio Housing Tropical Plants

Examples of 350 species of cacti may seem like more needles per square inch than anyone could care to have. However, Luke Vortman (5112) says he continues to add to his collection. "I only have about one-fifth of all known species."

The cacti-all carefully labeled -are growing alongside his home, in the yard behind his home, and in his home. It's not a safe place to walk barefooted

The species come from all parts of the world where cacti grow. Luke does have some rare ex-

### **Top Toastmaster Office Goes to Roger H. Johnson**

Roger H. Johnson (4251) was presented with his District Governor's certificate at the recent Toastmasters International con-

vention in Seattle.

Prior to his election as governor of District 23, made up of 35 clubs in New Mexico and the El Paarea, Mr. SO

Johnson held the offices of Area Governor and District Lieutenant Governor. He is also a past president of Sandia Toastmasters Club No. 765. (Any Sandia Corporation employee is welcome at their weekly meetings held Thursdays at 6 p.m. at the Coronado Club.)

amples from New Mexico. One of the most interesting was found in northern New Mexico and is scarcely distinguishable from small pebbles in shape, size, and coloring.

When moving the tropical varieties indoors during winter months became too much of a chore. Luke remedied the situation: he extended his house. He enclosed an existing patio, laid plexiglass atop new roof beams, and ended up with a partly glass-enclosed dining area (complete with brick fireplace) plus an area for his tropical plants and a small waterfall.

In addition to cacti and other succulents planted in clay pots and in the ground along two sides, the main center planting strip contains papaya, orchid, pineapple, Jacob's coat, papyrus, and a local variety of willow tree cut down to fit under the roof.

"At first keeping aphids and other garden pests under control in this warm, humid area was a problem," Luke said, "because insecticides killed the gold fish in the pond." His solution was ingenious Luke captured a swarm of lady bugs and they are keeping the insects under control.

"Strangely enough," he said, "the lady bugs don't wander into the house, nor do friends and visitors object to them."

#### Congratulations Born to:

Mr. and Mrs. W. E. Bosken (7311-4) a son, William E., Jr., on Aug. 12.

Mr. and Mrs. R. L. Henderson (7311-2) a son, Brian, on Aug. 16. Mr. and Mrs. Bruce R. Higgins (4221) a son, Jeffrey Matthew, on Aug. 4.

Mr. and Mrs. John M. Farner (4251-1) a daughter, Sandra Lee, on Aug. 14.

Mr. and Mrs. George Voida (1112-2) a daughter, Carol Diana, on July 26.

Mr. and Mrs. Frank A. Ross (2452-3) a daughter, Susan Marie, on Aug. 18.

Mr. and Mrs. G. L. Young (8142-2) a son, Stewart Gregory, on Aug. 6.

Mr. and Mrs. V. K. Gabrielson (8142-1) a son, Mark Allen, on May 11.

Mr. and Mrs. John Daniel (8233-3) a son, Lee, on Aug. 20.

### Sympathy

To A. B. Anderson (7311-3) for the death of his brother in Torrance, Calif., Aug. 8. To Oscar E. Carter (7532-2) for

the death of his father on Aug. 14. To T. B. Hanna (3231-1) for the death of his brother in Texas Aug.

To Glenn C. Ryan (7312-1) for the death of his father in Altoona, Pa., recently.

To Frank Cupps (8233-1) for the death of his father in Barton, O., Aug. 15.

To Norma



Lynda Boose (3126)

#### Take A Memo, Please

Statistics continue to show that industrial workers have fewer accidents at home than those not exposed to safety training on the job.

"Sandy" has been at Livermore Laboratory since June.

Mary Claire Ayen (8213-2) married Richard Lee Sites (8163-1) Aug. 18 in a candlelight ceremony at the First Presbyterian Church in Livermore. The couple spent their honeymoon at Lake Tahoe, Virginia City, and Reno.

Both have been employed at Livermore Lab since July 1958.

#### Attend Strain Gage Course

Dave Bray (8123-1), Bob Schultz (8124-1), and Jack Wittek (8125-1) today completed a 10-day course at the University of California at Los Angeles on the Theory and Application of Strain Gages.

#### Two Decades, Three Years

Oleta Morris (4333-3) and her husband, Harry, celebrated their 23rd wedding anniversary Aug. 14.

#### **Crow Canyon Dance**

Members of Division 8221 held an informal dinner-dance party Aug. 19 at the Crow Canyon Chateau, not far from Livermore. Arrangements were made by Jim Harter (8221-1).

Mr. Johnson has been employed for the past 13 years in the Program Machining Division and has been a supervisor in that organization since 1952.

#### Square Dancing Class

Cleo F. Hughes (2442) will instruct the Yucca Square Dance Club's fall series of lessons for adult beginners, which starts Sept. 7.

The 18 consecutive lessons will be held on Thursdays at 7:30 p.m. at the Albuquerque Square Dance Club Building at 2410 Washington NE

The Yucca Club is the oldest square dance club in Albuquerque with an active membership since 1938.

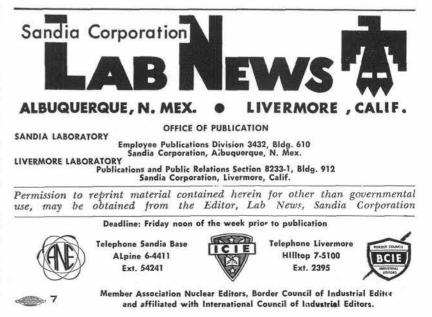
For further information call Walt Eden (4511-4), telephone 299-7421, or Cleo Hughes at AX 9-5054.

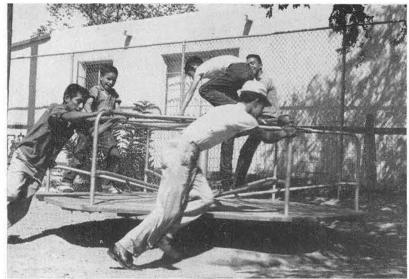
When last seen, the swarm had shown a preference for the willow tree and an area about eight inches wide and three feet high was covered by black dots moving around on a red background. Truly a sight for sore eves!

the death of her brother in Provo, Utah, Aug. 9.

To John B. Adams (8221-1) for the death of his father in Osborne, Kan., July 17.

To O. D. Belden (2343-1) for the death of his father in Monona, Iowa, recently.

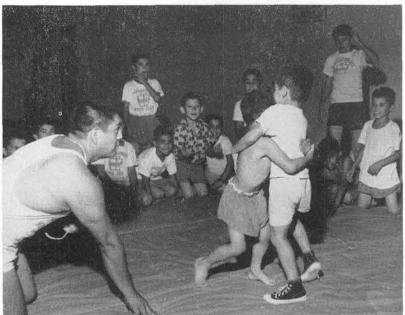




PLENTY OF ENERGY is displayed by neighborhood youngsters at playground area of Martineztown House of Neighborly Service. Martineztown House provides a variety of athletic and craft activities for 35 boys. Nursery facilities for 50 young children are provided.



STUDIOUS MEMBERS of Albuquerque Boys' Club relax with good books at the Club's library. Boys' Club also offers a well coordinated program of many athletic and recreational activities.



YOUNG GRAPPLERS put on a show of strength for spectators in Albuquerque Boys' Club wrestling class. Classes are supervised by UNM wrestler Mike Havrier, left. Other activities include weight lifting, tumbling, handball, baseball and basketball.

#### Continued from Page One

# Large Share of UCF Funds Helps Albuquerque Youth

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America.

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rectorial capacities: Don Spatz

(7145-1), vice president of the or-

ganization; Dwayne Mozey (7115-

1), district chairman; and Mel Pe-

tersen (7213-1), camp chairman.

The children of many Sandia fam-

ilies are members of the organiza-

Cook, is a Campfire "Bluebird.'

The agency is under the executive

The UCF provides the entire

budget for operation of the Chap-

arral Council of the Girl Scouts of

The Council provides a day

camp for girls, and a four-day

resident camp. Complete group-

leadership classes are provided for

those who supervise camping ac-

Several Sandians and Sandia

employees' wives are on the board

of directors, and a large percent-

age of the 5000-member enroll-

ment is comprised of children of

Sandia families. Also, many San-

dians and their wives take part in

Scout leadership and advisory ac-

A wide range of activities are of-

fered which are designed to help

girls become useful. responsible,

active citizens. All racial, religious.

and economic groups are included

About one-third of the total Boy

Scout budget is derived from the

UCF. Funds are used for staff sal-

aries and expenses and, to a cer-

tain extent, for field expenses.

There are about 11,000 enrollees

in the Kit Carson Council. A large

percentage of Sandians and mem-

bers of Sandia families participate

Board of the Kit Carson Council

was S. P. Schwartz, Sandia Cor-

Formerly active on the Executive

A few of the many Sandians who

take part in Scout activities are

the following: Members of the

Manzano District Council-G. A.

Fowler (7000), who also serves on

the Executive Board of the Kit

Carson Council; J. C. L. Leslie

(3431-1), W. C. Clark (7323-2); H.

E. Lenander (7100); and L. P. Wil-

Those active on the Sandia Dis-

trict Council are: F. I. Magee

(2313), R. D. Brooks (2331), J. T.

Brown (7511-2), R. W. Whitson

(7521-1), E. E. Chester (7522-1),

F. F. Taylor (3465-1), and P. R.

mer camps for Scouts: Camp Zia

The Council sponsors two sum-

in the Scouting program.

poration President.

son (1121-1).

Owens (4111-1).

and Camp Conchas.

in Girl Scout activities.

Kit Carson Council,

**Boy Scouts of America** 

direction of Mrs. Lucile Johnson.

**Chaparral Council of** 

**Girl Scouts of America** 

The 1961 "UCF Girl," Charla

the agency also supports a number active in administrative and diof social and educational programs. Camp facilities, residences for men, and fellowship groups are all provided. Camp facilities are also made available to 15 non-YMCA needy groups.

Almost one-fourth of the operating income of the YMCA office is derived from the UCF.

Albuquerque Boys' Club

Approximately 70 per cent of the total income for the Albuquerque Boys' Club is received from the UCF. Joe T. Baca is director of the Club, and the staff includes several other university-trained instructors

Some 1400 boys are enrolled in Club programs, which include gymnastics, weight lifting, wrestling, basketball, baseball, flagfootball, handball, and physical fitness. The Club provides facilities for crafts and games, library, study room, and TV-movie room. Each day, about 350 boys make use of the Club.

Albuquerque Boys' Club sponsors the only gymnastics team in the city. Team members are chosen from the Club's regular enrollment. Young Women's

#### **Christian Association**

The Young Women's Christian Association receives about 50 per cent of its operating income from the UCF. Funds are used to finance staff and facilities and to pay for various teenage programs.

The wives of several Sandia employees serve on the YWCA board of directors. The membership includes many Sandia employees and their children.

The Albuquerque office sponsors an active teenage summer program for young women 12 to 17 years of age. Activities include classes in baby-sitting, cheerleading, and twirling, as well as training in social etiquette, arts and crafts, and sewing. Training is organized into two four-week sessions.

A convenient residence facility is provided by the YWCA, as well as a room rental registry and transient facility.

A YWCA folk dancing group was organized recently, and almost 90 per cent of the group consists of employees of Sandia Laboratory.

#### Albuquerque Council of Camp Fire Girls, Inc.

The entire income of the Albuquerque Council of Camp Fire Girls comes from the UCF. Funds are used for maintenance and staff expense. Funds for camping activities are derived entirely from candy sales.

Almost 2500 girls are currently enrolled in Camp Fire Girl activities. Summer activities include hiking, camping and work in various crafts.

Several Sandia employees are

F. R. Kappel Elected Board Chairman; E. J. McNeely New A.T.&T. President

Continuing to be the chief ex-

LAB NEWS Sept. 1, 1961 Page Three

#### Industrial Hygiene **Chemistry Lab Joins** U.S. Reference Service

The Chemistry Lab of Industrial Hygiene Division 3311 has become a part of the U.S. Public Health Service's nationwide Analytical Reference Service.

This is a voluntary association of over 100 federal, state, and municipal agencies, and of industries and universities conducting laboratory programs.

R. G. Elsbrock, supervisor of Industrial Hygiene Chemistry Section 3311-1, requested that Sandia become affiliated with the Service as an aid to standardization of tests.

The Service's purpose is to improve laboratory analytical methods. This is accomplished by analyses of environmental samples, prepared in quantity by the Service and distributed to member laboratories. By comparing the results, the accuracy of presently approved methods can be statistically evaluated, information may be exchanged on weaknesses, and proposed new methods may be appraised.

Since it was organized in 1954, the Service has made 14 studies to determine specific sources of air and water pollution and more effective means of preventing, controlling, or removing the contaminants, including radioactive mat-

R. J. Everett (3311-1), at the request of Dr. John Harley, Director of New York Operations Office, AEC, is cooperating in establishing chemical analytical methods for radio-nuclides.

### W. H. Kingsley Appointed to **Health Board**

W. H. Kingsley, supervisor of Environmental Health Division



selected by the Bernalillo County Commissioners to serve a two-year term as a member of the Bernalillo District Health Board. His name was pre-

sented by County Commissioner Harry Kinney (7183).

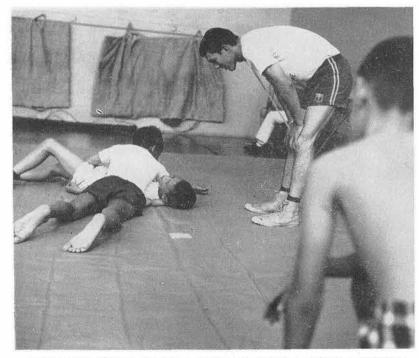
Consisting of four members, the District Board oversees the activities of the District Health Office which plans programs for children and underprivileged provides nurses.

The District Health Board, working closely with the County Commission, also makes recommendations on such matters as improvement of health facilities and expenditures.

The State of New Mexico Department of Public Health has eight District Health Boards.

E. J. Quail Retires

3311, has been



DAVE MARSHALL, YMCA wrestling instructor, referees training session on the mat at the "Y" physical training department. In addition to wrestling, training is offered in many other physical conditioning activities. These and other youth programs are provided underprivileged children at YMCA South Broadway Branch. ecutive officer of the company. Frederick R. Kappel, American Telephone and Telegraph Company president since 1956, was elected chairman of the board at a meeting of the directors Aug. 16

Eugene J. McNeely, for six years executive vice president of the company, was elected president of A. T. & T. and becomes the tenth person to hold the position.

William C. Bolenius, executive vice president since 1958, was elected vice chairman of the board.

James E. Dingman, vice president and chief engineer, was elected to succeed Mr. McNeely as executive vice president.

Claude M. Blair, who has been vice president-staff of the Pacific Northwest Bell Telephone Company, was elected a vice president of A. T. & T. He has responsibilities for space communications programs.

The board announced that these changes were being made to most effectively meet the increasing complexities and long-range growth of the business.







W. C. Bolenius E. J. McNeely



#### J. E. Dingman C. M. Blair

#### After More Than 10 Years at Sandia

Elbert J. Quail will retire today after working for Sandia 10 and a half

years. He has been in the Plant Maintenance Department the entire time, mainly in Heating Plant Section 4514-2. Mr. and Mrs.



Quail will continue to live at 2725 Aliso NE. They have four daughters, living in Gallup, Colorado, California, and Alaska. There are also seven grandchildren and four great grandchildren.

About the time Mr. Quail retires, their daughter from Alaska will be coming to Albuquerque for a visit and to leave her daughter here. The Quails' grandaughter will live with them while she attends St. Joseph's College "and we are thrilled to have her," Mr. Quail added.

In addition, Mr. Quail takes an active interest in gardening.



SEPTEMBER 1, 1961



LAB NEWS

WEATHER, WIND, TEMPERATURE forecasts are now visually shown on a board outside of Room 47, Bldg. 880. Tim Raftery (7243-1), right, originated the idea and Bob Burgess (7213) donated his free time to paint the 13 oil sketches which will be alternately displayed as weather changes occur.

# Wide Presentation of Sandia **Tech Papers Set This Month**

Several Sandians have prepared papers which will be presented at technical society meetings during September.

G. W. Anderson (1310) is now in Paris attending the Colloque International 1961 Sur les Ondes de Detonation. He will present a paper entitled "Electrical and Optical Effects of Shock Waves in Alpha Quartz."

"Brain Function and Structure and Reflex Arc Simulation" is the title of a paper written by Bruce Van Domelen (7223-1), Katherine Weston (5426), and Iben Brown-(Sandia consultant). Mr. ing Browning will read the paper at the 16th National Conference of the Association for Computing Machinery, Sept. 5, in Los Angeles.

J. P. Weber (1312-1) has prepared a manuscript for inclusion in a paper to be presented by Monsanto Chemical Company at the national meeting of the American Chemical Society in Chicago, Sept. 3-8. Title of the paper is "Full-Scale Detonation Testing of Prototype High Pressure Cell.'

W. E. Boyes (1440) is the author of a paper which will be presented to the St. Petersburg-Tampa "Suncoast" Section of the American Society for Quality Control on Sept.

# Supervisory Appointments

RICHARD MAX ALLAN to supervisor of Operations Division

3452, Electronic **Data Processing** Department.

Max has been at Sandia since June 1953 and has worked in Business Methods and Auditing. For the past four years he has been supervisor of Pro-

gramming Section I, 3451-1. Before coming to Sandia Max attended the University of Colorado, where he received a Master's degree in accounting. He earned his Bachelor's degree in econom-

ics from Washburn University. He previously had administrative work experience with heavy construction companies. Max served two and a half years in the Army in a tank destroyer unit. He is a member of the Operations Research Society.

# Sandia Lab Space Packages to Be Displayed At UNM During IRE Space, Telemetry Meet

Three instrument packages representing Sandia participation in programs to measure background radiation in outer space will be on display Sept. 6-8 at the IRE Sixth National Symposium on Space Electronics and Telemetry.

The exhibits and symposium sessions will be at Johnson Gymnasium on the University of New Mexico campus.

The "hardware" is provided by Space Projects Division 7232 and the overall exhibit is being arranged by Community Relations Section 3431-2.

The three instrument packages are for use in a high altitude balloon experiment, the Ranger lunar flights, and the Mariner experiment.

The balloon experiment is designed to determine the effect of cosmic rays on a radiation detec-tion system. In flight above 100,-000 ft. cosmic rays are unaffected by the earth's atmosphere. The unit on display is the Sandia logic

#### W. R. Barton Returns From Holland Meeting **On Rocket Flight Tests**

William R. Barton, supervisor of Applied Aerodynamics Section 7131-2, attended a meeting on the use of rockets for flight research in Scheveningen, Holland, July 17-21. The meeting was sponsored by the Fluid Dynamics Panel of the Advisory Group for Aeronautical Research and Development (AGARD), and the countries represented were those belonging to the North Atlantic Treaty Organization (NATO), of which AGARD is a part.

PHIL H. ARNOLD to super-

visor of Programming Section I,

system which determines pulse amplitudes, pulse durations, and the order of coincidence among several detectors. The information is telemetered to a ground receiving station. Additional systems for this exhibit will be provided by Los Alamos Scientific Laboratory.

In the center of the display will be Sandia Corporation/LASL detectors developed for use with NASA Ranger Flights I and II to measure X-rays of solar origin.

The Ranger exhibit includes a prototype solar cell of the type which will power the Sandia/ LASL portion of the experiment. The Mariner instrument pack-

age is also a joint Sandia/LASL

experiment. Two Mariner flights are planned to pass close to Venus to measure atmospheric and surface conditions. Two electrostatic analyzers will determine the electron and proton densities in space between the radius of the orbit of Earth and the radius of the orbit of Venus.

Above the instrument display case will be a space mural depicting Earth and space as viewed from a position 25 miles above the surface of the Moon.

The exhibit booths are open to the public on Wednesday from. 3:30 p.m. to 8 p.m.; on Thursday from 10:30 a.m. to 5:30 p.m.; and on Friday from 10:30 a.m. to 2: p.m

# Coronado Club 'Big Dance' Set Sept. 8; Wee Bonnie Baker Sings

Coronado Club will hold its biggest dance of the year on Friday, Sept. 8, when the 12-piece orchestra of Chuck Cabot, singer Wee Bonnie Baker, and comedian Billy Rogers will appear.

Chuck Cabot has been playing in major clubs and hotels throughout the country, and is known for his records "Down the Lane," "Rag, Rag, Raggedy Moon," "Charlie, My Boy," and "Let the Rest of the World Go By." The Caboteers, The Cabot Trio, and the Choir will be featured with his orchestra.

Wee Bonnie Baker, who in the early 1940's sold six million records in one year,

and has performed at the Blue

No social hour will be held on

the night of the dance, but social

hour prices will be in effect from

6:30 to 9 p.m. A buffet dinner,

costing \$1.75 per person, will be

In other events at the club,

George Davies will play for the

Saturday night dance tomorrow,

including "Oh, Johnny" and 'You'd Be Surprised," will be guest vocalist with the orchestra. Billy Rogers, an off-beat humorist, has appeared on the Ed Sullivan Show several times,

Angel night club.

Sept. 2, from 9 to 1. Cost is \$1 for members, \$1.50 for guests.

A Teenage Record Hop will be held on Saturday, Sept. 9, from 8 to 11 p.m., with guest discjockey Kenny Dark as emcee. Tickets are 25 cents and must be picked up by parents of the youngsters.

On Labor Day, the snack bar, patio bar, club bar, and pools will be open, but the restaurant will be closed.

Tommy Kelly's combo will provide live music tonight from 5 to 8 p.m. Social hour is from 4:45 to 6:15, and the \$1.75 buffet is served from 6 to 7:30.

Coronado Club members are reminded that square dance instruction will begin on Sept. 5. The 12-lesson course, which costs \$10 per couple, will be held on Tuesday nights from 7:30 to 10 p.m.

Basic and advanced dance classes, which were scheduled to begin Monday, Sept. 11, will start on Sept. 18. However, those who wish to register on Sept. 11 may do so in the lobby of the Coronado Club. (The ballroom will be used for Sandia Corporation's University Night on Sept. 11.)

Charles (3452) and Holly (4151) Balistrere will teach Latin rhythms, and Gail (3463) and Jennifer Ward will instruct American dancing in both the beginning and advanced classes. Cost for the 10week course is \$6 per person.

At the August Board of Directors meeting, it was decided that no penalty fee will be charged to rejoin the club. This applies only to members who have withdrawn from the club's rolls in the past 12 months; they may either pay past dues or pay one year's dues (\$25) in advance.

previous term of employment at Sandia (1952-55) he was assigned to Field Testing.

From 1955-58 he worked in computer programming for North American Aviation at Columbus, 0.

Phil has a Bachelor's degree in mathematics from Nebraska Wesleyan University and a Master's degree from Kansas State University. He is a member of Phi Kappa Phi, scholastic honorary society, and an associate member of Sigma Xi, science honorary.

He served in the Navy for three



3451 - 1, Electronic Data Processing Department.

Phil has been working in the Electronic Data Processing organization for

served from 7 to 8:15. Dancing will be from 9 to 1, with enterthe past three tainment scheduled from 11 to years. During a 11:45 Tickets for the dance, which

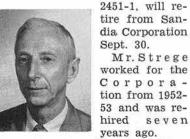
cost \$3 per couple for members, and \$3.50 for guests, may be picked up at the club office. Table reservations may be made at the time you get your tickets.

11. The paper is entitled "The Specification and Uses of Quality Control Data."

"Structural Adhesives Characteristics and Application" is the title of a paper written by N. J. DeLollis (1112-2). He will give the paper at the Symposium on Adhesives for Structural Applications to be held at Picatinny Arsenal, Dover, N. J., Sept. 27-28.

# H. W. Strege Will **Retire Sept. 30**

Henry W. Strege, an engineer in Product Tester Section I,



tire from Sandia Corporation Sept. 30. Mr. Strege worked for the Corpora tion from 1952-53 and was rehired seven years ago.

He plans to return to Bellingham, Minn., and reopen a business he previously operated.

DONALD K. ROBBINS to supervisor of Advanced Development

Division 3454, Electronic Data Processing Department.

Don has been with Sandia nine years. During that time he has worked in systems analysis, reliabili-

ty evaluation, and as a section supervisor in Department 3450.

His previous experience includes two years in the research organization of Magnolia Petroleum in Dallas.

He holds a PhD degree from Vanderbilt University, a Master's degree from the University of Minnesota, and a Bachelor's degree from Texas Technological College. All are in physics.

Don is a member of Sigma Xi, honorary science society, and the American Physical Society.

He served two years in the Navy.

and a half years

### Sandians Active in 'Promised Valley' Drama

Several Sandians participated in a recent presentation of the musical drama, "Promised Valley," which recreates the arrival of the Mormon pioneers in the Great Salt Lake Valley.

The drama is being presented this summer throughout the world by the Church of Jesus Christ of Latter-day Saints. It was offered in Albuquerque Aug. 25 and 26, and in Los Alamos at the Civic Auditorium on Aug. 28. Gaynor Atkinson (2331) served as co-director. Leading roles were played by Ross Birdsall (2411), George Lemmon (1322), and Russ Acton (1113). Dale Richey (2442), Bill Jemison (1442) and Joyce Wiltbank (3126) were in the chorus and Donna Hilton (3126) was one of the accompanists.

CONNIE CLAUS (4333-3) considers taking a final dip before the closing of the Coronado Club twin swimming pools for the season which is scheduled to take place on Labor Day, Sept. 4.



DRIVE DATES for the Livermore Laboratory part in the United Bay Area Crusade are spelled out by R. E. "Smokey" Maxwell (8225), in-plant chairman. Looking on, 1 to r, are committee members

A. I. Gregory (8213-1), auditor; Cathy Banks (8213-2), treasurer; R. A. Dickson (8233-1), publicity, and E. A. Aas (8144), assistant chairman. Livermore Laboratory goal this year is \$12,000.



SANDIA ALL STAR softball team put up a good showing in the recent Intra-Base Tournament. From an early lead the Sandia Lab team dropped the final two games to KAFB, tournament champs. In the first row, from left, are Bob Evans (4412), Ron Bump (7523), Tex Hughes (4412), Roy Hanson (7523) and Gene Glaze (1431). Standing are Jim Fjelseth (3461), Jim Hay (4254), Ted Trybul (7183), Bruce Bauer (7223), Frank Duggin (4314), Herb Filusch (7124), Jim Kelly (2632), Larry Tabor (4412), and Dennis Mangan (1413). Team members were chosen from both leagues.



#### SEPTEMBER 1, 1961

Sandia Lab Golf Roundup . . .

### Tri-Atomic Tourney Set; LASL Matches Coming; Santa Fe Results

First annual Tri-Atomic golf tournament among members of Sandia Laboratory, ACF, and AEC Golf Associations will be held on Sept. 16 at the University of New Mexico course starting at 9 a.m.

Each team will be limited to 28 players. A team trophy will be awarded to the winning association. In addition to the trophy the following prizes will be given in the form of gift certificates: low gross, three places; low net, six places; and three-ball teams, five places.

Deadline for entries is Sept. 6. Entry fee is \$1 and the \$2.50 green fee is payable at the course.

On the same day, Sept. 16, 40 Sandia golfers will journey to Los Alamos for the first of two matches to be played with the Hill golfers. On Oct. 14, Sandia will be hosts to the Los Alamos players. Golfers must participate in both events, and total fee for the two tournaments, \$15, should be paid before the Los Alamos tourney. The price includes green fees, social hour, and dinner for the golfer and his wife at both places. Single players may enter for \$12.50.

Deadline for entering is Sept. 8. For further information contact Fred Romero (3122), ext. 29157.

Jim Leonard (7147) won low gross honors with a 75 in the SEGA Santa Fe tournament on Sept. 18. Low net winner in the first flight was Larry Smith (5111); second flight, Werner Kuhn (2344); third flight, Hugh Kimbrough (3243); and fourth flight, Tom Sheldon (4411) and Bill Rappleyea (4253). Walt Green (7115) won the prize for the closest shot to the pin on a designated green.

# Sandia Gun Club Offering Two 'Sighting-In' Shoots

The Sandia Gun Club is sponsoring two "Sighting-In Shoots" in the interest of hunter safety and as a public service for the benefit of New Mexico sportsmen. The shoots will be held from 1 to 4 p.m. on Sept. 3 and Sept. 10 at the Sandia Base rifle range.

The two shoots will provide a safe, well-supervised place for hunters to sight in their rifles before the 1961 hunting season. An officer will be in complete charge of the range at all times, and shooters are requested to give him their fullest cooperation.

A limited amount of instruction in proper operation of the rifle and

#### Charlie Chavez Is Top Man on Tennis Ladder

Charlie Chavez (2642) is currently at the top of the 1961 singles tennis ladder. In second place is Joe Teague (1332), followed by Bob Betz (6010) in third position. Altogether, 30 Sandians are vying for positions on the ladder.

The tennis ladder is on an open challenge basis, and a player must win two out of three sets to defeat his opponent. When the person being challenged is defeated or forfeits, the challenger takes his position and the loser as well as the remaining players on the ladder move down one position.

### Organizational Winners Playing Lab Tournament

The Sandia Gun Club is spon- sighting-in procedure will also be oring two "Sighting-In Shoots" in offered at that time.

Sportsmen are also invited to the Sandia Gun Club's monthly meeting on Sept. 6 at 7:30 p.m. in the Community Room of the Albuquerque National Bank, 123 Central NW.

A Hunter Safety Program will be presented by a qualified National Rifle Association hunter safety instructor. Refreshments will be served after the meeting.

For further information contact Hank Cranston (4413) or Wes Kimbrel (4514), who are in charge of the shoots.

### Welcome Newcomers

Aug. 14-25

	Albuquerque	
	Jane A. Cooper	2341
	William E. Farrar, Jr.	3441
	*Sue Ann Hanks	3423
	*Cynthia J. Harris	3446
	Rita M. Herrera	3126
	Charles A. S. Herrmann	3462
	Justus A. W. Horstman	1321
	Jerry M. Kaufman	4152
	Mary Martinez	3126
	Brenda E. McAtee	4135
	Hubert L. McCall	7536
	Tillie H. O'Neil	3126
	Donald J. Papineau	3444
	Sherry L. Reardon	4611
	M. Helen Richardson	4325
	Audrey A. Simpson	3126
	Cecile D. Tortorice	4135
	Glenn A. Vecker	7536
	Mary June Vinson	7212
	*Gerald M. Whitlock	3444
	California	
	Donn L. Stewart, Livermore	1000
		4233
	Florida	
	Thomas G. Coleman, Jr., Gainesville	7234
	Indiana	
	John E. McDonald, West Lafayette	1124
	William Van Dusen, Jr., Notre Dame	5434
	lowa	5101
		7004
	Irwin E. Magerkurth, Iowa City	1224
	Kansas	
	Charles W. Gwyn, Lawrence	5432
	William J. Hudson, Lawrence	3423
	Louisiana	
	Andrew J. McPhate, Ruston	7146
	Michigan	
	michigan	

TEAM 34-4100 walked off with the championship of the Sandia Lab National softball league. The champions lost only one of the 18 games played. Standing (1 to r) are Leo Chavez (3444), Joe Mickey (3463), Al Apodaca (3446), Fritz Arens-

dorf (3462), Joe Costales (4153), Chuck Newman (3452), Frank Lucero (3452) and Bob Banks (4151). Kneeling in front are Jerry Williams (7322), Bob Gevirtzman (4113), Bob Guerrero (4135), Lew Sisneros (4152), Jim Fjelseth (3461).



CHAMPIONS of the Sandia Laboratory American Softball league are pictured above. The combination 13-1400 team defeated 7100 in the final playoffs taking two games out of three. In the front row are (1 to r) Art McMullen (1424), Frank Mistretta (1321), Bill Fulcher (1321), Karl Stevens (1321), Dennis Mangan (1413), and Gene Glaze (1431). Standing are Lee Hogue (1423), Ed Shaut (1431), Chuck McCarty (1431), Don Burns (1321), Lee Schulz (1331), Dave Weingarten (1422), Les Shope (1413), Leland Allen (1423), and Olden Burchett (1331). Series was played in August. Organizational champions and runnersup are now competing in the Sandia Laboratory Singles Horseshoes tournament. Matches are being played at noon on the east side of Bldg. 840.

Following are the champs and runnersup who are participating:

Org. 300	Champion Al Holmes	Runnerup
2300	Don Hurt	John Hiller
400	Ross Sinkey	Bob McElderry
5/2600	Steve Neff	Frank Alden
400	Boney Vigil	Bob Taylor
100	Duane Hillard	Lewis Sisneros
200	Les Cole	J. B. Sweatman
1500	Fonzo Cossell	Carlos Ortega
600	Gene Monahan	Ludwig Eversge
5100	Bob De Zeeuw	Dave Barham
200	George Duffield	Contractor and the second
300	Lou Flores	Harry Wheeler
500	Dan Padilla	

#### Ken Foster Champ of Livermore Golf Meet

Ken Foster (8161-2) won the low net trophy for his score of 67 in the August Livermore Lab Golf Tournament held at the Pleasant Hills Golf Course at San Jose. Low gross winner was Bob Joseph (8232-3) with a score of 79. Forty players participated in the event. The next tournament is scheduled for Sept. 16.

Kenneth W. Drake, East Lansing	7521
Missouri David L. Keune, Kansas City Robert W. Martin, Kansas City Kenyon E. Nowotny, Parkville	1431
New Mexico Evelyn P. Guerin, Los Alamos	4132
<mark>Oklahoma</mark> Kendall R. Hill, Ponca City William W. Hollis, Stillwater	3151 4122
rexas Carl B. Bailey, Austin Denotes rehired	5426
Returned from Leave ames F. Boespflug, Bozeman, Mont ulogia H. Lopez condra L. Markham	4624

### State Horseshoe Pitch Set in Belen Sept. 9-10

First annual New Mexico state horseshoe pitching tournament will be held during the Valencia County Fair in Belen Sept. 9 and 10. Applications and \$1 entry fees for the tournament must be in by Sept. 5, and can be turned in to Fonzo Cossell (4512), Jim Taylor (4224), or Parker Burns (2643).

A "C" class has been added and all pitchers are eligible. For further information or application blanks, contact any of the three men named above.

#### Living at Livermore

# Beautiful Backyards Provide Luxurious California Leisure

LAB NEWS

California backyards-the subject for many an article in house and garden magazines-are more than pretty pictures for many Sandians at Livermore Lab.

A Lab News reporter, scouting around for a story on California leisure living, came across three outstanding examples at the homes of Livermore Lab employees. All feature swimming pools, lush greenery, and large patios for outdoor enjoyment.

Pictures, in this case, do far more than words in describing the features of these luxurious living areas-all of which would be a fine addition to any house and garden magazine.



LUSH GREENERY in backyard of G. A. "Fred" Boeck (8155-2) and family adds "atmosphere" to outdoor recreation at their home in Alamo, Cal-

ifornia. The flowers surrounding the pool attract many hummingbirds. At left is Fred's youngest son, Peter, next, daughter Carole, Mrs. Boeck and Fred.



ORIENTAL MOTIF is carried out in the backyard of the Bert Paines' (8164-2) at their home in Livermore. Bert spent months of spare time in planting, planning, and constructing the corner landscaping which includes a rock waterfall. Bert's wife Beverly pauses in her gardening, while he relaxes in the shade. (It figures!)

#### Weekend Traveler

# Lick Observatory Offers Stars To Livermore Lab Vacationer

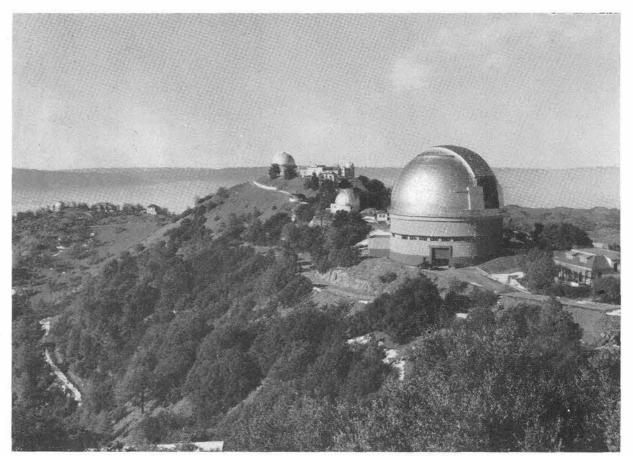
Sandia Corporation employees at Livermore will find Lick Observatory within easy reach. This is the fifth article of a series describing places of interest in northern California and New Mexico.

A trip to the moon via the telea short distance away for the Liv-

Two routes may be taken from scopes of Lick Observatory is only Livermore to the observatory. The more scenic but more difficult is



SWIMMING AND BARBECUING are popular pastimes for Gunner Scholer (8165-2) and his family in their spacious California-style backyard. California's warm, sunny weather provides ample opportunity to enjoy many backyard activities. Here Gunner, and wife June, supervise play of their children, Sigrid, Karen, Lisa, Bill, Gunner, Jr.



ermore Lab weekend vacationer.

The Lick Observatory, operated by the University of California, is one of the first mountain observatories ever built, and has among its facilities a 120-in. reflector telescope, the second largest in existence today. The observatory is situated on the 4200ft. summit of Mt. Hamilton, near San Jose, about 45 miles from Livermore.

Several smaller telescopes, also located at the observatory, include a 36-in. and 12-in. refractor-type (the only telescopes open for public viewing), and a 36-in. and 22in. reflector type. In addition, there is a 20-in, astrograph, which can photograph and determine positions with great precistar sion.

The observatory is open daily, including weekends, from 1 to 5 p.m. But it is closed on University holidays. The telescopes are open to visitors on Friday nights only and require admission tickets, which may be obtained without charge by writing to the Lick Observatory, Mt. Hamilton, Calif. Visitors' guides are generally available.

Mines Road, a winding narrow highway. A more direct route, through San Jose, has better roads but heavier traffic.

James Lick, for whom the observatory was named, was an early Pennsylvanian who plied his trade as pianomaker in the early 1800's in South America. In 1847 he came to San Francisco with \$30,000 in gold doubloons which he parlayed into a \$3,000,000 fortune via real estate ventures.

Lick, a bachelor, was an eccentric who lived in poverty despite his millions. When he neared 80, he placed his estate in the hands of a Board of Trustees which was instructed to spend the money for certain public benefits. Some Lick's requests were: for a of home for old ladies in San Francisco, \$100,000; for free baths in San Francisco, \$150,000; for a California Institute of Mechanical Arts-a manual training schoolfor the boys and girls of San Francisco, \$540.000; for the Lick Observatory, to contain the most powerful telescope in the world, \$700.000.

The observatory was completed in 1888, twelve years after Lick's

TELESCOPE DOMES and buildings dot the second largest in the world, is housed in the large University of California's Lick Observatory on top dome building in the foreground. The buildings are of Mount Hamilton. The 120-inch telescope, the open to the public from 1 to 5 p.m. daily.

death, and was the finest of its day. Its 36-in. refractor telescope, under which Lick's body is buried. was the world's most powerful at the time. It still has a magnifying power which can be varied from 270 to 3000 by changing the eyepiece. Under ideal atmospheric

conditions, features on the moon can be seen through it as if they were only 80 miles away.

The 120-in. reflector telescope, completed in 1957, cost \$2,500,000, or nearly four times the amount of Lick's original bequest. The tube of the telescope is 50 ft. long and weighs approximately 40 tons with the mirror in position; the total weight of all moving parts of the telescope is about 150 tons. The only larger reflector telescope in existence is the 200-in. Hale telescope on Mt. Palomar in southern California.



"Mr. Q," Sandia's security conscience, will soon distribute colorful, handy stickers to remind employees who use classified files to secure their safes at closing time. Each accountability station will receive a package of stickers and directions for attaching the stickers to every safe. Nona Smith (3126/3232) displays a sticker.

# Sandia Service Awards

**15 YEARS** 

Jeme Wolintz 4252

Sept. 9, 1946



John P. Suttman 3463 Sept. 9, 1946

#### 10 Years

Sept. 2-15 A. B. Metzger (retired), V. A. Southerland 3423, Ernest C. Cordova 4252, Ross L. Birdsall 2411, Bertha A. Vencill 7512, Harley E. Walker 1443, Fred J. Villa 1332, Marion L. Drago 7115, G. W. Browning, Jr. 4622, Mary J. Yager 3121, Delmar W. Dufty 4252. Jack Hammerstran 2452, David A. Mayhew 2422, Louis J. Price 4514, Charles A. Tucker

SHOPPING CENTER

CLASSIFIED

**ADVERTISING** 

Deadline: Friday noon prior to week of publication unless changed by holiday.

RULES

AEC employees only No commercial ads, please

FOR SALE

'60 MOTORCYCLE, BSA 650 cc twin super rocket, windshield, mirrors, saddlebags. Green, AX 9-8747.

5-BDR MOSSMAN, 13/4, 1/2 baths, air cooler, drapes, garage, sprinklers, estab-lished yard, walled. 3620 Georgia NE. Whittaker, AX 9-9172.

TAPE RECORDER, stereo, Bell & Howell, list price \$259.95, sell \$190; Heath-Kit 20-watt amplifier, preamplifier, AM tuner, assembled, \$55. Hodges, AM 8-5097.

One ad per issue per person Must be submitted in writing Use home telephone numbers

Include name and organization.

Sandia Corporation and

1. Limit: 20 words

3.

5.

6



L. A. Hopkins 2500 Sept. 10, 1946

4413, Eloy V. Sedillo 4614, Lawrence J. Witt 5153, Silvero Lujan 4624, Leon D. Moritz 1422, Robert S. Tarbell 2531, Harold R. Vaughn 7131, James G. Marsh 3422, Marvin L. Harvey 4224, Alden V. Luhrs 2563.

Martin A. Serna 4512, Gerald E. Hannan 4231, Robert L. Whitlow 4516, Deforest H. Rushing 4232, Harry D. Doro 3452, Gordon W. Marney 4621, Marion M. Holmes 4213, Edward S. Roth 2564, Albert E. Sensel 7117.

# ROBERSON 3-BDR, family/dining room, 13/4 baths, entry hall, complete elec-tric kitchen, double garage, many de-corator features. Hermann, 9909 Chapala Dr. NE, AX 8-0419.

- MISCELLANEOUS amateur radio equip-ment. Scussel, 8511 Los Arboles NE, AX 9-8786.
- RUG—genuine Chinese handmade Orient-al 9'x12', center fuchsia, border gold, floral pattern, socrifice at \$175. Smail-er, AX 9-8413.
- '54 FORD RANCH WAGON 2-dr., 6-cyl., stick shift, R&H, \$325. Henderson, AL 6-4794.
- 3 BDR HOUSE, patio, landscaped, lawns front and back, \$12,000, \$500 down. Holmes, AX 9-5109.
- WING CHAIR, rose color, \$25; Chinese lamps, one pair, \$20; man's travel toilet kir, leather case, new, \$5. Metz-ger, 298-5054.
  - BABY BUGGY, converts into car bed, \$12;
  - HOFFMANTOWN BRICK, close to schools,
  - 9-4059.
  - ELECTRIC COFFEEMAKER, drip type, 48-cup capacity, cheap; two-burner hot plate, may be seen in Division 1424, 802/402 or call Dixie, ext. 53238.

#### H. C. Biggs Will Chair **Standards Meeting** In Los Angeles Sept. 15

H. C. Biggs, manager of Physical and Electrical Standards Department 2410, will attend a meeting of standards laboratories and professional societies representatives Sept. 15 in Los Angeles to discuss formation of an Association of Standards Laboratories.

As chairman of an Ad Hoc Committee which has been studying feasibility of such an association since June 1960, Mr. Biggs will be in charge of the meeting.

The meeting will be held in conjunction with the Instrument Society of America's 16th Annual Instrument - Automation Conference and Exhibit.

Specific types of needs that could be met with an Association of Standards Laboratories would be uniform calibration procedures, techniques, certificates and reports; methods of stating confidence levels on reports and certificates; informing instrument makers of measurement requirements; informing NBS of realistic standards requirements; determination of standard laboratories environmental requirements; conducting inter- and intra-laboratory comparisons of measurement results; and establishing training facilities.

The Ad Hoc Committee hopes that the major result of the Association of Standards Laboratories will be nation-wide measurement agreement.

#### We've Moved

The LAB NEWS office has moved to room 5, Bldg. 610, southwest of the Administration Building. The new telephone number is ext. 54241.



LAB NEWS

PERHAPS THIS SECRETARY went a bit overboard in cleaning out her classified files, but chances of a security infraction or unaccounted-for document have been greatly reduced. Sandia Corporation is conducting its annual file purge during September and October and all organizations will be cleaning out their files.

# Annual 'Clean-out-the-Files' **Drive Gets Underway Today**

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Sandia Coroporation's annual "clean - out - the - files" campaign gets underway today, according to the Security organizations at Sandia and Livermore Laboratories. In the next 42 working days, all organizations will reduce classified document holdings.

SEPTEMBER 1, 1961

This will be accomplished in several ways: documents can be sent to Central Record File if a copy is not already there; documents can be sent to Records Depository if a retention schedule has been established; or documents can be destroyed if no longer needed.

PAGE SEVEN

The security organization believes that by decreasing the number of classified documents on hand, fewer infractions and unaccounted-for-documents will result.

During September and October each accountability station will compile and maintain records of documents disposed of in the purge. Results should be reported to Division 3231 at Sandia Lab or Division 8241 at Livermore Laboratory no later than Nov. 17.

AIR CONDITIONER, evaporative, 4000 cfm, \$90; dining room set, 6 chairs, table, limed oak, dropleaf, opens to 36"x72", \$50. Quate, ext. 41297.

SHOPPING CENTER

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RCBERSON 3-bdr, dining room, 1<sup>3</sup>/<sub>4</sub> bath, w/w carpeting, air conditioned, walled, fireplace and other extras. Cordova, AX 9-3460.

- AA 7-3400.
   16-PANE WINDOW, steel frame, glassed, screens, venetian blind, \$40; B-flat metal clarinet, \$35. File, DI 4-8853.
   LA HACIENDA AREA, large 2 bdr., one bath, dining and utility rooms, FHA appraisal \$15,000, \$600 down. Crosley, AI, 5-0106.
   POOK OF KNOWL FOOT.
- BOOK OF KNOWLEDGE with seven year-books, \$35; six-slide file cases, hold 300 2x2 slides, \$1 each. Scranton, AX 9-5720.
- APA-10 Panoramic adaptor for sale or trade, for how much or what have you. Stephenson, AX 9-3914.
- 58 TRIUMPH TR3, wire wheels, tonneau cover and winter top, R&H. Messer-smith, AM 8-9474 after 5 p.m.
- PORTABLE WATER COOLER. Smith, 256-7147.
- TRAILER, 2-wheels, 6:00-16 tires, 4'x6' box, \$40. Toya, 125 El Pueblo Rd., NW, DI 4-2775.
- Bauder, AX 7-7322. TYPEWRITER, standard, \$15; oscilloscope, \$20: evaporative cooler, \$10; table-top

ABY SITTING EVENINGS or weekends in SE area. Competent high school senior. Duffy, AM 8-5075. BABY

SHOPPING CENTER

- 2 PRE-SCHOOL AGE CHILDREN to keep in my home, references furnished. Morris, AX 8-3001.
- AX 8-3001. TO RENT well furnished 3-bdr house, Heights location, Sept. 15 thru June 1, 1962, will lease. Arthur, AX 9-7044. MAID, Tuesday and Thursday each week, care for two children and housework, Carlisle Plaza area. Rose, DI 4-8592. DEstriction of new bridge Island High-
- RIDE, vicinity of new bridge, Isleta Highway, Blake Rd., Bridge St. or etc., to Bldg. 892. Guajardo, ext. 33159.
   CHILD CARE in my SE Heights home, ages 2-4. Cash, CH 2-3721 after 3 p.m.
- ALL BLACK male kitten, will provide lcts of tlc. Colgan, CH 3-4882. RIDE, vicinity of 7th and Coal. Sandoval, 243-2411.
- GIVE AWAY, 2 male kittens, 6 weeks old. Howard, 247-3243.
- TWO RIDERS to join car pool vicinity Hendola and Hannett NE, Snow Heights, to gate 4. Taylor, AX 9-2281 or Mills, AX 9-2130.

#### FOR RENT

- FURNISHED 1-BDR. house, North Highway 10, Sandia Park vicinity, \$75/mo. Miller, BU 2-3168.
- 2-BDR. APT, with stove and refrigerator, newly redecorated, air ocnditioned, storage space, water and garbage paid. Tillman, 528 Cardenas SE, inquire at Apt. B.
- LARGE ROOM, private front entrance, private bath, TV, radio, new furniture, close to bases. Johnson, AX 9-3348.

SHOPPING CENTER NEXT

DEADLINE FOR SHOPPING CENTER ADS Friday Noon, Sept. 8

SHELTIE (TOY COLLIE) PUPPIES, AKC registered, show and obedience cham-pion stock. Schneider, AX 9-6243.

8'x10' RUG with pad, light blue, wool, \$25. Claassen, AL 5-4347.

- 30" GAS RANGE, \$45. Gasser, AL 5-4562. SOFA, Early American, cushions need re-covering, \$30. Weir, AX 9-1160.
- 4' DEEP DRAFT BOAT, fiber glass hull; boat trailer. Lathrop, TR 7-0754.

- boat trailer. Lathrop, TR 7-0754.
  SCHOOL DRUM, \$30; steel bunk bed set, \$45; trade boys' English racer bike for boys' regular bike, 26", same condition. Chapman, AX 9-0428.
  OUTBOARD MOTOR, Sea King 25 HP, electric starting; am buying larger mo-tor. Erdman, 253 Gen. Marshall NE.
  BANDSAW, 12", 2-wheel Shopmaster, max. depth of cut, 7", complete with extra blades and 1/4 hp GE 110VAC motor, \$60. Bauer, AL 5-7774.
  4-BDR, family room, 13/4 baths, 2-car garage, large lot, landscaping, fences, walls, sell for FHA appraisal. Shorp, AX 9-3745.
- AX 9-3745.

CONN ORGAN, \$850; typewriter, \$35; '57 Cadillac Fleetwood, factory air, electric window lifts, seats, locks, \$1995, terms. Dixon, AX 9-6886.

- KENMORE automatic washer, take over payments. Roth, AM 8-9773.
- - 7 BUICK Century hardtop, \$895; '55 Buick Special hardtop, PS, PB, \$590. Bauder, AX 9-7322. '57
  - \$20; evaporative cooler, \$10; oscilloscope, mangle, \$10; rural mailbox, \$2. Floyd, AX 9-2419.

- REFRIGERATOR, small Westinghouse, \$4 Pope, 816 Val Verde SE, AL 5-6702. \$45.
- BABY GRAND PIANO, 5' Kimbell, \$850. Patrick, AX 8-4972.
- MAHOGANY TABLES, two end tables and one drum table, tops need refinishing, \$5 each. Shieler, DI 4-8617.

baby car seat, \$2. Silva, AL 5-3723.

bus, shopping, shady yard w/sprinklers, fruit trees, carpet, draperies, \$16,500, \$1100 down. De Montmollin, AX

'56 FORD STATION WAGON, R&H, OD, \$550. Mann, ext. 24239.

SHOPPING CENTER 

GIRL'S TAP SHOES, 131/2M, used 4 times, \$6; Baby Tenda, \$3; play pen and pad, \$9. Wladika, 4818 Idlewilde Ln. SE, AL 5-9166. k 20, 15 VHF, hux AIRPLANE, Mooney Mark 20, 1956 140 TT, 240 hrs., S.M.O.H., VHF, OMA ADF 1960 paint design, aux. tan \$7750, will trade. Ortiz, TR 7-3025. '52 BUICK, 4-door, R&H, \$175. Bode, AL 1400 HP JOHNSON outboard motor, \$150;
 24" jigsaw, \$45; double bed complete,
 \$20. Grymkoski, AX 9-4053. FURNISHED ROOM, pine paneled, carpet-ed, walk-in closet, private barh and entrance, close to Base, gentleman preferred. Joseph, AM 8-5414. 5-8483 OMNI 25 6 FORD ½-ton pickup, \$150. Flowers, AL 6-1656. '46 FORD tank, COLLINS 32/3 Transmitter, three spare 4D32 tubes; Collins 75A2 receiver, speaker; 30' American Tower with CDR rotor and quid antenna. Mileshosky, AL 5-8904 after 5. \$7750, will trade. Uniz, in 7-3023. PORTABLE RADIO-PHONO, \$30; blond corner step-table, \$7.50; 20" 3-speed window fan, \$15; 8-place settings Dragonfly Winfield China, half-price. '60 CHEVROLET IMPALA sport coupe, V-8, MATRON OF HONOR outfit, complete, \$32, used once, size 161/2, \$25; '50 Chevrolet, \$125. Chavez, DI 4-8984. powerglide, power steering, R&H. Car-nicom, 3208 Lykes Dr. NE, AX 9-9262 after 5:30 p.m. 2-BDR., carport, partly furnished, five minutes to Sandia Base, \$75/mo. Curry, AL 6-9779. Dragonfly Winfie Rueb, AX 9-4805. TRAMPOLINE, children's portable Empire, 6'x8' frame. Abbott, AX 9-8860. EER RIFLE, 300 Savage w/scope and scabbard. Temple, 923 Cardenas NE, AL 6-3048. ADBILE HOME, 35', air conditioned, car-pet, \$65/mo. Located at Marco Polo Trailer Court. Newhaus, AX 9-1347. SIAMESE KITTEN, 7 weeks old; h and car seat. Martin, AX 8-2064. DEER hi-chair RIFLE SCOPE, variable 4 to 9 power with lens caps, \$35. Klett, DI 4-9021. BEDROOM SET, grey oak, large dresser w/mirror, small chest, twin beds, new, \$365, sell for \$200. Inglat, TR 7-1146 after 5:30 p.m. AKC registered German Shepherd female puppies, 16 weeks old, for sale or trade. Sandoval, 2801 Parsifal NE, AX 9-9407. 3/4-TON WIZZARD air conditioner, used approximately 30 days, \$100. Workman, 298-3604. " TV, blond console, tube guaranteed, \$69; 20-watt stereo amplifier, \$29; Fil-ter Queen vacuum cleaner, \$19. Chand-ler, AX 8-1976. BDR HOUSE, 11/2 baths, walled yard, attached garage, electric stove and refrigerator furnished, off San Mateo NE, \$100/mo. water and garbage paid. Hodges, AM 8-5097. 21 1 40 HP electric start Sea King, 15' skiing, fishing and hunting boat, pulls 3 skiers, \$800 or trade for house trailer. Westman, AL 5-6048 after Sunday. BDR, 134 baths, dining 'room, utility w/220v., built-in range, Spanish fire-place, vigas, sprinklers, landscaped, walled, \$16,000, no qualifying. Hewitt, AM 8-2563 or AM 8-2822. '61 3 BDR 12' YELLOW JACKET BOAT, complete w/
 25 hp Elgin motor and trailer, \$595. Miller, AL 6-4384 after 5 p.m. AUTOMATIC WASHER, '59 Montgome Ward, rotating agitator, \$50. 816 Quincy NE, AL 5-8842. BDR APT., newly decorated, water and garbage paid, five minutes from Kirt-land. Myers, TR 7-9714 after 7 p.m. Elliott Miller, AL 6-4384 after 5 p.m. INEZ BRICK, 3 bdr., 13/4 baths, carpet-ing, draperies, ac, landscaped, sprinklers, walled, corner lot, \$6000 equity or new FHA available. Smith, 7702 Cutler NE. 2 PR. LINED D R A P E 5, 100"x82" and 124"x84", beige with tropical design; assorted venetian blinds. Brake, AM 8-8320. " TV, Hoffman console, lim casters, \$95. Stang, AL 6-7793. LOST AND FOUND limed oak 21" GI AMMO, 30-.06; 45 ACP, \$1.50 per 100; revolver, pre-war Colt .38 special officer's model, holster, \$30. Ray, AX DST — Wedding band with diamonds, ladies rose gold Bulova watch, 9 keys on ring, brown rim glasses similar to type safety issues, No. 16 key on ring, windshield wiper, Spanish verb wheel, black rim glasses, key on metal ring, Sheaffer or Parker gold ballpoint pen. Lost and Found, ext. 26149. SHOTGUN, Feather Lite Ithaca, 12 ga. pump, \$65. Wright, AL 5-5103.
BICYCLE, girls 26", \$15 or best offer. Binder, AX 9-2937. LOST FOR SALE AT LIVERMORE 9-1330 AS BURNER, floor type, Coleman 31A, 35,000 BTU, 18"x26"x30" deep, \$20. Deeter, AL 5-5789. 30-30 CAL. RIFLE, savage bolt action holds four shells, \$45. Corbett, Ext. 2433. KENMORE 30" gas range, 1960 model w/ griddle, wide oven, timer. Amos, 298-4470. 8-8320. 2433.
 DINETTE TABLE with four chairs, need reupholstering, \$25. Janssen, HI 7-5235.
 PLEASANTON HEIGHTS 3 bedroom, 2 bath home, wall-to-wall carpeting, dropes, \$24,500 - 434% G.I. Loan. Froth, VI '59 TRIUMPH TR3. Brown, 299-0788 after DOUBLE HOLLYWOOD BED, \$30; youth bed w/mattress and spring, \$20; double foam mattress, \$10. Hamlet, AX 9-5124. 6 p.m. or weekends. HATCHET, scout type, \$2; nylon poncho, scout type, \$3. Hughes, 299-6674. FOUND—Glasses with heavy brown frames, black desk ballpoint pen, Sheaffer pen with initials RKP. Lost and Found, ext. 26149. FRYRYTE deep fat fryer, \$5. May, AX TELESCOPE, Jaegers 31/4-inch refractor; metal parts, tubes, rack and pinion, tripod, counter-weights, etc., no extra cost. Kyrlach, DI 4-3083. 9-2624. 9 FORD, 4-dr., heater, recent valve grind, \$125. Emig, AX 8-2193. '49 5 FORD Country Sedan, 9 passenger, R&H, Fordomatic, \$700. Myers, 1413 Georgia NE, AL 6-0468. '55 6-4294. ENGLISH JUMPING SADDLE by Milba, six months old, sell at loss. Haley, DI BC 348 shortwave radio, \$50 or highest offer. Beers, HI 7-2572. HOFFMAN CONSOLE TV, radio, phono, mahogany, needs some work. Kenneth, AL 6-6059. WANTED BACH (STRADIVARIUS) professional type trumpet and mutes, \$150; '59 Triumph T20S scrambler; two matched end table lamps, \$16; model airplane engines. months 4-3919. MUMMY TYPE Army or Navy sleeping bags, buy or trade. Pritchard, AM 8-6430. '48 BUICK SUPER, 4-door sedan, stand-ard transmission, 64,000 miles, \$150 or best offer. Lundbom, HI 7-4026. 9'x12' UMBRELLA TENT w/floor, used about six times. Kerstetter, 10510 Snow Heights Blvd. NE, AX 9-3766. TWO TOOL BOXES of toolmaker and machinist precision tools. Rickert, AL 5-6879. lamps, \$16; mo Hayes, 298-4682. SUNBEAM self-propelled power mower, cost new \$150, sell for \$65 or best offer. Wagner, AX 9-2347. BUFFET, 5', oak, heavy duty, one year old, \$75. Padilla, AX 9-0460. TRADE Kenmore electric clothes dryer for MISC. FURNITURE, Cheap. Myers, CH 7-8784 after 5 p.m.
'50 CHEVROLET 1/2-ton pickup, \$295. Bruington, AL 5-6164 after 5 p.m.
'54 TRAILER, 24' Alumalite, modern, \$1500; pontoon boat and trailer. Young, 1146 Columbia Dr. NE. 3 BEDROOM, 2 bath home, wall-to-wall carpeting, draped, family room, elec-tric kitchen, dishwasher, sprinkler sys-tem. Cleary, HI 7-5933. gas dryer, never been used. Tatum, TR 7-0997. 2-BDR HOUSE, near Highland High, priced 2-bb HOUSE, Hear Highland High, priced right, will take clear house trailer in trade. Causey, AX 9-0089, evenings.
'61 FRIGIDAIRE electric range, used 1 month, \$175 or best offer, available Sept. 15. Shaifer, AM 8-7234. WORKBASKETS, any or all issues of Work-basket dated back as far as available, also any books on edgings, buck towel-ing-weaving, and doilies. Markham, TR 7-0515 after 5 p.m. STAUFFER TABLE, three years old, cost new \$300, will sacrifice for \$150. Hunt, Ext. 2283. CAR TOP luggage carrier, \$5. Rayner, AM

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SEPTEMBER 1, 1961



LAB NEWS

TACTILE ILLUSTRATION for the braille version of "Chicken Little" is displayed by Mrs. Bernice Umland (2563). Other books for blind children, illustrated by Mrs. Umland and other Sandians, are on display at Sandia Base Special Services Library.

### Ever feel a picture? Blind Children Get New Look at the World – Thanks to Several Sandians

Children are sticklers for literalism in anything offered for their entertainment. This axiom is especially well-known to any adult who has faced corrections of a young listener who is familiar with a story being told to him.

Children's demands for literalism also tax talents of illustrators for children's fiction, as Mrs. Bernice Umland (2563), who illustrates books for blind children, knows well. She is one of a number of Sandia employees engaged in preparing illustrations for children's braille books.

The group includes Mrs. Willard Converse, whose husband is administrative assistant for Organization 1100; Evys Warren (1442), a certified braillist; Elizabeth Frost (1422), treasurer of the Braille Service of New Mexico, Inc.; and Mrs. Elsie Demas, whose husband is in Sandia's Component Evaluation Division 7523. The group began the illustrating project six months ago.

Pictures in books for blind children must be "seen" when touched. Thus they are known as tactile illustrations.

"The pictures we prepare for children's braille books must be literal illustrations of the texts," Mrs. Umland pointed out. "We're even careful to use correct colors in the pictures, so that a sighted child can never point out to a blind friend that the colors in the tactile illustration aren't right." The illustrations are charming to the sighted observer as well as to the blind child. They utilize color and shape as well as linear dimension, and they display one quality which is not found in conventional illustrations: tactile shape.

sions," Mrs. Umland explained. "Some books are naturally more difficult to translate than others. We've been successful in illustrating children's arithmetic books. In depicting arithmetic concepts, we don't need to be quite so concerned with literalism in color and texture."

The tactile illustrator uses a variety of materials in preparing illustrations, paying special attention to texture and to shape.

"We find that rough-textured cloth and fur are especially useful. These materials tend to excite children's curiosity, from a tactile point of view. After all, there aren't many people who can withstand the temptation to touch a fur coat, or to pet a rabbit," Mrs. Umland explained. Match sticks, toothpicks, string, paper, buttons, beads, and other small pieces of durable, appropriatelytextured material are used.

"The children are fascinated by the large beads and buttons we use for the eyes of the animal characters of stories. We build houses and other structures of match sticks. One of the most difficult illustrations I undertook was the translation of the idea of a ray of light into a tactile form. I finally solved the problem by bending a long piece of yellow chenille into what I thought was an engaging shape, and then pasting it to a piece of paper. The children caught on right away," she said. An exhibit of children's braille books with tactile illustrations is being shown through August at the Sandia Base Special Services Library. The exhibit is unique in New Mexico and rare in the country, since Albuquerque is one of the few places in the United States where books for blind children are being illustrated.

# New Mexico Environmental Test Workshop Will Be Hosted by Org. 7300 Sept. 14-15

Some 120 representatives of research and development laboratories, military agencies, and universities will meet at Sandia Laboratory Sept. 14-15 to attend the first New Mexico Environmental Testing Workshop



Dr. I. Vigness field. A tour of Sandia's environmental test facilities in Areas I and III is also a feature of the program.

Dr. Irwin Vigness, Director of the Naval Research Laboratory's Shock and Vibration Branch, will be dinner speaker Thursday, Sept. 14, at the Kirtland AFB Officers' Club. His talk is entitled "Shock and Vibration Tests." Dr. Vigness is a national authority on environmental testing, experimental stress analysis, and allied fields.

#### Henderson to Speak

R. W. Henderson, Vice President, Weapon Programs, will present the introductory address of the Workshop. Title of his talk will be "The Role of Environmental Testing in Nuclear Ordnance Development."

W. A. Gardner (7300) is general chairman of the Workshop. E. H. Copeland (7321) is chairman of the arrangements committee, A. W. Reger (7322) is tour committee chairman, and P.H. Adams (7323) is technical program committee chairman.

Mr. Gardner is chairman of the first program session, "Philosophy and Economics of Environmental Testing." Mr. Adams and Don Williams, Jr. (7311) will introduce the speakers presenting papers and Max McWhirter (7325) will chair the first workshop session on "Shock." The "Space Problems" session will be directed by H. D. Sivinski (7311-1). The "Vibration" session will be chaired by M. R. Madsen (7324). The "Special Problems" session will be chaired by J. W. Pearce (7310), and R. H. Schultz (7320) will direct the "Summation" session.

#### **Technical Papers**

Technical papers to be presented by Sandians include: "Shock Testing Using an 8-in. Air Gun," R. M.

#### W. J. Barlow Is First Sandian to Retire From Livermore Lab

William J. Barlow, who will retire from Sandia Corporation Oct. 1, will become



Morrison (8126-2); "Some New Techniques for Recording and Processing Vibration Test Data," R. M. Tidwell (8125-1); and "Low Power Electromagnetic Radiation Detector," C. W. Cook (7311-4). Other papers to be presented are: "Analog Data Reduction Facility for Environmental Tests" by Archie Treadwell, Lawrence Radiation Laboratory; "Analog Computer Analysis of Vibration Data" by F. E. Seusy, KAFB; and "Transient Calibration of Piezoelectric Accelerometers" by R. C. Dove and W. E. Baker, University of New Mexico. Mr. Dove is a consultant working with Division 7323 this summer as a participant in the faculty summer employment program.

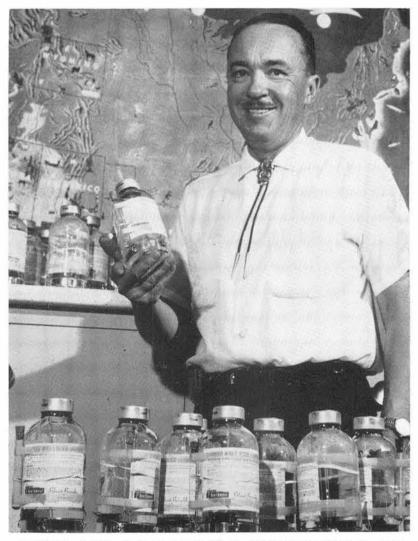
#### **Discussion Topics**

Some of the topics to be discussed in the workshop sessions include: Testing of Models vs. Prototypes, Use of Statistics in Test Planning, Problems in Testing Beyond 3000G, Interpretation of Shock Signatures, Zero Shift of Piezoelectric Accelerometers, Environmental Testing Using Rocket Sleds, Space Environment Simulation, Problems in Re-entry Simulation, High Temperature Simula-

tion, Low G or Zero G Testing, Automated Data Processing and Plotting, Combined Temperature-Vibration Testing, Problems in Electromagnetic Radiation, and Extension of Severity to Meet Future Requirements.

Participating agencies include Sandia and Livermore Laboratories, White Sands Proving Grounds, Field Command-DASA, Kirtland AFB, Air Force Special Weapons Center, Naval Weapons Facility Evaluation Unit, Holloman AFB. Los Alamos Scientific Laboratory. and the University of New Mexico.

The concept of an Environmental Testing Workshop originated in informal discussions among environmental testing personnel in various installations in the New Mexico area, according to Mr. Gardner. Since much of the nation's advanced environmental testing is performed by Sandia Corporation and other installations in New Mexico, it appeared that a technical information exchange meeting would be mutually profitable. It is expected that through this exchange new approaches to mutual testing problems can be critically examined.



DONOR of 100 pints of blood, W. L. McCormick (1121-2), has spent 23 years providing the vital fluid for others in need. Empty flasks represent a portion of his total blood donation.

"The success of the illustrations depends on the illustrator's ability to translate the book's prose into believable tactile impres-



1956. Bill has been with Sandia Corpora -

the first San-

dia employee to

retire from Liv-

ermore Labora-

tory since its es-

tablishment in

tion since 1952. Before transferring to Manufacturing and Shop Liaison Section 8234-2 at Livermore Lab last year, he worked in Quality Control programs at various storage sites.

A former railroad man, Bill was employed by the Kansas City Southern Railroad Company for 22 years, rising to Master Mechanic. He also served 10 years on other roads before joining Sandia. During World War I, he served aboard a submarine and was an instructor in the submarine service

Bill attended Centenary College in Shreveport, La., where he majored in accounting. He later took night classes at the University of New Mexico.

He and his wife live at 3817 Madeira Way, Livermore. They have two daughters and three grandchildren.

Bill has no immediate plans for the future, but expects to keep busy with investment interests and salmon fishing.

## **One Hundred Pints of Blood Gi** By W. L. McCormick in 23 Years

The mature human body is the receptacle of approximately five quarts of fluid upon which life itself depends: the blood. Before the development of modern transfusion and storage techniques. people had to depend upon their own blood supply, but today's blood can be replenished, strengthened, and even replaced.

For W. L. McCormick (1112-1), blood banking has been a longterm activity. He has 100 pints of blood, donated over a period of 23 years, to his credit. Mr. Mc-Cormick's donations have been made to hospitals and blood banks on the East Coast and in several locations in New Mexico. He has given blood in several instances where direct transfusion techniques were used.

"My first donation was made in Brooklyn in 1938," he explains. "That was some time before modern 'blood banks' had come into being. I underwent a major operation, and some time afterward a friend told me that I'd received

three pints of blood during the surgery. It was at that time that I decided to repay the debt by making some donations. I made the latest one — the hundredth two weeks ago."

"Before World War II, some of the transfusion techniques were rather unusual." he recalls. "A direct transfusion setup was the most usual method, but once in a while a rotary-syringe system was used, in which several 20cc syringes were filled and emptied. I remember set-ups using receptacles as diverse as milk bottles and mixing bowls."

In his early years as a donor, Mr. McCormick kept a record of his donations, and made speculations about the patients who were benefited. "I eventually lost track of the records," he says. "But it didn't really matter, because I seldom had any idea who received the blood I donated. I was satisfied to know that I was helping somebody. It didn't matter who.'

Sandia's current safety record of 23 days or 805,000 employee-hours without a dis-abling injury ended Friday, Aug. 25, when a sheet metal worker suffered a severe contusion on his thigh and a severe sprained ankle.

Sandia's Safety Record

sprained ankle. At the time of the accident, the em-ployee was assisting an operator of a large power shear. He was standing at the rear of the shear, and placed his right leg beneath a bar which goes up and down when the power shear is running. When the bar descended it hit his thigh, caus-ing a severe contusion. He also twisted his ankle. The employee reported to Clinical Medical Department and was treated for the injury. He is now recovering at home.

Laboratory HAS WORKED 131,800 MAN HOURS OR 25 DAYS WITHOUT A **DISABLING INJURY** 

Livermore